given 2600 cc. of blood in six hours. In streptococcus hemolyticus in his clinic, recoveries have increased 50 per cent by transfusion. Good results have been obtained in lateral sinus thrombosis and in severe types of exophthalmic goitre.

In conclusion, we remark that undoubtedly the most gratifying feature in these evidences of progress in surgical practice is the contemplation that every advance step means the mitigation of human suffering, the prolongation of life in greater comfort, and the contributing to the sum total of human joy, which after all represent the best rewards and the greatest stimulus to the surgeon for the attainment of the highest possible efficiency in the practice of his chosen profession.

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Hospital Standardization and the Closed Hospital—Since every physician is in favor of anything that will contribute to the better care and treatment of the sick, no argument is necessary to convince the medical profession of the desirability of improving the efficiency of hospital service. The term (standardization of hospitals) is an unfortunate one, since it does not convey in any sense the ends to be accomplished, namely, better care and treatment of the sick. The best criterion of hospital efficiency is the amount of human suffering relieved by the work done in that institution. . . .

Most hospitals are controlled and managed by a board of trustees, and this body is responsible for the policies of the institution. Hospitals are the workshop of physicians; the material worked on is the sick; the output is health. . . . When medical men dominate the policies of the boards of trustees of hospitals, we shall see fewer humiliating instances of medical men selling their soul and body and independence to an institution for the privilege of having their names appear as a member of the staff of the institution.

The closed hospital has come to the front as a result of the propaganda of so-called standardization of hospitals. This sounds much like, and is on a par with, the closed shop of the labor unions. Unless a man is a member of the union, he may not work in a union shop or place.—The American Medical Press.

1922 Death Rate is Higher and Birth Rate Lower—The Department of Commerce announces that provisional mortality figures compiled by the Bureau of the Census for the first quarter of 1922 indicate higher death rates than for the corresponding quarter of 1921. For the States compared the death rate for the first quarter was 13.7 in 1922 against 12.6 for the first quarter of 1921. The highest mortality rate for the quarter is shown for the District of Columbia (17.6) and the lowest for Wyoming (9.6). These early figures forecast for the year 1922 a higher rate for the death registration area than the record low rate (11.7) for the year 1921.

Provisional birth figures compiled by the Bureau of the Census for the first quarter of 1922 indicate lower birth rates than for the corresponding quarter of 1921. For the States compared the total birth rate for the first quarter was 23.3 in 1922 against 25.3 in 1921. The highest birth rate for the quarter (29.2) is shown for North Carolina and the lowest (16.5) for the State of Washington. Higher rates will be necessary for the remaining months of the year if the 1922 rate is to equal the 1921 rate for the birth registration area—24.3.—The Modern Hospital, October, 1922.

THE HEMORRHOID PROBLEM *

A REVIEW

By SOL. HYMAN, M. D., San Francisco

Twenty-five hundred years ago Hippocrates treated piles by cauterization with the hot iron and by ligature, and no advance was made until the introduction of general anesthesia. The ancient methods were then improved, and later Whitehead devised his operation for complete excision of the pile-bearing area, so that today we have the three principal methods of handling piles: ligature, clamp and cautery, and the radical Whitehead procedure.

During the past twenty-five years the fashion with regard to the choice of procedure has changed, but nothing new has been added. At the beginning of this period the German school was dominant, and the clamp and cautery held the field. Then, for a brief period, trained surgeons, seeing the possibilities for a real cure in the excision of the hemorrhoidal plexus, adopted Whitehead's radical operation. But this never could become a general procedure, requiring greater surgical ability than that possessed by the host of practitioners upon whom responsibility for the treatment of piles falls.

Latterly there have come into being specialists for diseases of the rectum and anus, many of whom lack the surgical training necessary for the performance of this often major operation; and practically all of them advocate ligature, either in mass or with dissection of the individual piles, this view being shared by most American surgeons, some reserving the Whitehead operation for the extreme cases with a complete rosette.

Of the three operations at our disposal, which is the best, judged from the standpoints of simplicity, post-operative comfort, and freedom from complications and recurrences?

1. *Simplicity.* The clamp and cautery operation is the simplest, with the ligature method in all of its modifications following as a close second. There is but little to choose between them. Whitehead's procedure, necessitating an accurate dissection and removal of the lower end of the bowel, cannot be reckoned with these from the viewpoint of simplicity.

2. *Post-operative Comfort.* Arthur Neve, in a series of 855 cases, states that, following the ligature operation, many of the patients suffered great pain; following the clamp and cautery operation, practically none. The catheter was used once, on the night of the operation, in about 10 per cent, and subsequently in but two or three of the 855 cases. Anderson reports 300 operations in 18 months from St. Mark's Hospital in London: 150 by ligature, 100 Whitehead, 50 clamp and cautery. Severe post-operative pain was present in none of those operated upon with the clamp and cautery, in 10 per cent of those in which the ligature was used, and in 16 per cent after the Whitehead operation; moderate pain followed these procedures in 30 per cent, 57 per cent and 56 per cent, respectively; and but little pain in 70 per cent, 33 per cent and 28 per cent. The degree of pain was

* Read before the Surgery Section of the State Medical Society Annual Meeting, Yosemite, May, 1922.

measured by the amount of morphine required, little pain requiring none, moderate, one-quarter grain dose, and severe more. In his series the catheter was required in 10 per cent of the ligature cases, 6 per cent of the Whitehead, and none of those where the clamp and cautery was used. The average stay in the hospital was 10 days following the clamp and cautery, 21 following ligature and 26 in the Whitehead cases. Stone, reporting a series of 470 cases operated upon by the method of Whitehead, found that 36 of 146 cases required the catheter, and that the average stay in the hospital has been cut to 10 days.

3. *Post-operative Complications.* Hemorrhage of a noteworthy degree was present in one of Anderson's clamp and cautery, four ligature and two Whitehead cases. In spite of these figures we know that severe post-operative hemorrhage has followed the clamp and cautery operation in many an unpublished case, due to the gaping of the seared edges. Post-operative tags occurred in 6 per cent of the clamp and cautery, 5 per cent of the Whitehead, while 15 per cent of the ligature cases were followed by this annoying sequel. These tags usually require secondary removal to prevent soiling of the underwear, pruritis and burning. They are shrunken external hemorrhoids and are usually produced by the surgeon during dilatation of the sphincter, injection of the local anesthetic or in the course of the operation, and we know no method of preventing their occurrence. One sees them with or without dilatation of the sphincter. That most of them are due to the trauma of the operation itself is undoubted, our experience agreeing fully with that of Anderson. Painful thrombotic external piles, frequently requiring the evacuation of a thrombus to relieve the severe pain, are not uncommon following the ligature operation, and but rare following the clamp and cautery, as is the painful, tender, swollen rosette so often seen about the rectum after the use of the ligature.

Anderson found no abscesses or fistulae to follow the clamp and cautery, and but very few following other methods. Stone gives a list of 10 such cases in his series of Whitehead operations. Sphincter control (Anderson) returned:

Following clamp and cautery on the sixth day.

Following ligature on the tenth day.

Following Whitehead operation on the twelfth day.

Stricture followed in none of the clamp and cautery cases and in 45 of his 150 ligature cases, 5 per cent of them requiring instrumental dilatation up to six weeks following operation. All were cured. Stone reports five strictures in 185 of his Whitehead patients whom he was able to trace. The mortality is negligible, Neve having the only death in 2125 cases reported by four writers.

4. *Recurrences.* Neve notes five known recurrences in 885 cases. Anderson had none by any method, but did not follow his cases over six weeks from the time of operation. During six months, however, he met with but one recurrence after 18 years, in the hundreds of cases presenting themselves at the outpatient department of St. Mark's Hospital. Harvey Stone notes five more or less extensive recurrences in 185 cases followed, many more than one would expect after the radical excision of the hemorrhoidal area. There is no large series of cases reported giving us a basis for judgment concerning the ligature operation.

From the available literature it would seem that the clamp and cautery operation is the operation of choice from the standpoint of simplicity; that it is far and away the best operation in respect to post-operative comfort and freedom from complications, and as good as any judged by the number of recurrences.

In this connection it must be stated that O'Connor reports 500 cases operated upon by the Whitehead method without dilatation of the sphincter, with not one even partial relapse, and with a very comfortable convalescence.

A word should be said concerning the anesthetic. Some of the rectal specialists condemn the clamp and cautery operation as not feasible under local analgesia. I have performed dozens of operations in this manner, and assistants in the hospital have had no difficulty in doing so. In the light of the above figures their statement that the clamp and cautery procedure need only be mentioned to be condemned must be taken with a grain of salt.

In order to circumvent the danger from hemorrhage, really the only weak point, in the clamp and cautery operation, I perform the operation as follows: The individual piles are brought down, following dilatation of the sphincter (general or local anesthesia), and grasped at the base with a heavy, ivory-backed pile clamp, cut and thoroughly seared. Before removing the clamp the mucosa is caught above and close to the clamp with a hemostat. The clamp is now very slowly removed and a suture of fine catgut passed distal to the hemostat and tied above it so as to include the artery of the hemorrhoid which enters the upper third of the nodule. This suture, on a fine needle, is now whipped over the seared edge. This gives as comfortable a convalescence as does the simple clamp and cautery operation and completely relieves the worry concerning hemorrhage. For simple pedunculated piles the ligature is used, and the Whitehead operation is reserved for the extensive rosettes.

Now It Is the Super-Woman Nurse Who Is to Supersede the Doctor—The recommendations of the Rockefeller nursing committee, which organization is trying to gain a foothold in Michigan, and in our estimation ultimately to submerge the medical profession and completely supplant the garden-variety physician by the "super-woman nurse" who is to tell the people when they need medical aid and then call on the doctor for it. Our old German friend, Nietzsche, had nothing on the secretary of the Rockefeller nursing committee for ego.

We note with chagrin that the chairman of the Rockefeller nursing committee, the secretary of same and another member of the committee appear on the letter-head of the American Association for Labor Legislation (the old Health Insurance organization) as members of the administrative council. C. A. E. Winslow is chairman, Josephine Goldmark is secretary, and Miss Mary Beard is a member of the committee. Does it show that our old enemies, the advocates of Compulsory Health Insurance, are playing possum?—Editorial, Illinois Medical Journal, October, 1922.